

1/5/1

DIALOG(R)File 351:DERWENT WPI

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010374721 **Image available**

WPI Acc No: 95-276035/199537

XRAM Acc No: C95-125168

**Ultra-fine pipe membrane fabricated with overlapping layers of
ultrasonically-welded fleece strips - which remain fully effective and
functional as a food industry membrane even in the presence of minor
defects**

Patent Assignee: KOCH B (KOCH-I)

Inventor: KOCH B

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
DE 4403652	A1	19950810	DE 4403652	A	19940205	B01D-069/04	199537 B

Priority Applications (No Type Date): DE 4403652 A 19940205

Patent Details:

Patent	Kind	Lan	Pg	Filing Notes	Application	Patent
DE 4403652	A1		5			

Abstract (Basic): DE 4403652 A

In a process to fabricate a tubular membrane, a strip of membrane fleece is first wound in a spiral around a former such that adjacent margins overlap and are then ultrasonically welded together to produce a butt joint from which the former is withdrawn. A membrane is then applied to the inner face of the resulting fleece pipe as a solution which is then hardened. The novelty is that before application of the inner membrane, a further fleece membrane layer is helically wound externally onto the first such that the edges are laterally transposed to the first weld.

USE- The assembly is an ultra-fine filter esp. for the food industry.

ADVANTAGE - The pipe membrane remains fully effective and functional even in the presence of minor defects.

Dwg.1/2

Title Terms: ULTRA; FINE; PIPE; MEMBRANE; FABRICATE; OVERLAP; LAYER;
ULTRASONIC; WELD; FLEECE; STRIP; REMAINING; EFFECT; FUNCTION; FOOD;
INDUSTRIAL; MEMBRANE; EVEN; PRESENCE; MINOR; DEFECT

Derwent Class: D14; J01

International Patent Class (Main): B01D-069/04

International Patent Class (Additional): B01D-067/00

File Segment: CPI

102

2/5/1

DIALOG(R) File 351:DERWENT WPI
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011169223 **Image available**

WPI Acc No: 97-147148/199714

Related WPI Acc No: 97-290456

XRAM Acc No: C97-047049

**Tubular porous filter membrane for fluids - comprises helically wound
porous membrane having flat porous structure of thermoplastic core-mantle
fibres bonded on one side**

Patent Assignee: SARTORIUS AG (SARS)

Inventor: DOHRMANN M; GRUMMERT U; SCHMIDT H

Number of Countries: 019 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
DE 29620190	U1	19970227	DE 96U2020190	U	19961120	B01D-069/04	199714 B
WO 9719744	A1	19970605	WO 96EP5106	A	19961120	B01D-063/06	199728

Priority Applications (No Type Date): DE 1043954 A 19951125

Cited Patents: 11Jnl.Ref; EP 177167; EP 598908; JP 54131577; JP 55024575;
JP 55095556; JP 57063103; JP 62129108; JP 63077501

Patent Details:

Patent	Kind	Lan	Pg	Filing Notes	Application	Patent
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DE 29620190 U1 15

WO 9719744 A1 G 23

Designated States (National): JP US

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC

NL PT SE

Abstract (Basic): DE 29620190 U

A pressure resistant, porous, polymeric tubular membrane (TM) consists of (a) planar cuts of porous polymer membrane having an at least one side; and (b) a porous planar structure made of mantle/core thermoplastic fibres, whose mantle material is in constant with the membrane and has a lower m.pt. than the core and membrane material, with one side of the planar cuts overlapping a region of the cuts and being bonded leak proof in this region.

USE - As pressure resistant, microfiltration filter medium for liquids, esp. liquids contg. solid particles.

ADVANTAGE - A simply constructed filter medium avoiding frictional damage to the membrane during operation. Due to the high pressure resistance of the TM it can be incorporated in tubular modules without a support tube leading to simplified mounting and savings in material and weight, while allowing more TM to be incorporated in a large housing. At the same time safety during cleaning and sterilisation is ensured and contamination avoided in the absence of dead space between the TM and support tube.

Dwg.1/2

Title Terms: TUBE; POROUS; FILTER; MEMBRANE; FLUID; COMPRISE; HELICAL;
WOUND; POROUS; MEMBRANE; FLAT; POROUS; STRUCTURE; THERMOPLASTIC; CORE;
MANTLE; FIBRE; BOND; ONE; SIDE

Derwent Class: A18; A28; A88; J01

International Patent Class (Main): B01D-063/06; B01D-069/04

International Patent Class (Additional): B01D-069/10

File Segment: CPI